

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended) A semiconductor diode comprising:

a semiconductor die including a substrate, a first semiconductor film formed on said substrate, a second semiconductor film formed on said first semiconductor film, a first metal contact formed on said first semiconductor film, and a second metal contact formed on said second semiconductor film, one of said first and second semiconductor films being made of an n-type semiconductor material, the other one of said first and second semiconductor films being made of a p-type semiconductor material, said semiconductor die having two opposing first side edges a and b and two opposing second side edges c and d which ~~cooperates~~ cooperate with said first side edges a and b to define ~~thereamong~~ two diagonally opposite first corners a and b and two diagonally opposite second corners c and d, said first semiconductor film having an exposed area that is exposed from said second semiconductor film adjacent to ~~one of said first side edges~~ edge a and that extends between ~~one of~~

~~said first corners~~ corner a and ~~one of said second corners~~ corner c, said first metal contact having a first strip portion that is formed on said exposed area, and a first bonding portion that extends from and that has a width greater than that of said first strip portion and a length less than that of said first strip portion, said second metal contact having a second strip portion that is disposed adjacent to ~~the other one of~~ said first side edges edge b and that extends between ~~the other one of~~ said first corners corner b and ~~the other one of~~ said second corners corner d, and a second bonding portion that extends from and that has a width greater than that of said second strip portion and a length less than that of said second strip portion, said first bonding portion being formed on said one of said first corners a and b, said first strip portion extending from said first bonding portion to said one of said second corners c and d, said second bonding portion being formed on the other side of said first corners a and b, said second strip portion extending from said second bonding portion to the other one of said second corners c and d.

Claim 2 (cancelled)

Claim 3 (original) The semiconductor diode of Claim 1, further comprising a

quantum well sandwiched between said first and second semiconductor films.

Claim 4 (original) The semiconductor diode of Claim 1, further comprising an ohmic metal contacting film sandwiched between said second semiconductor film and said second metal contact.

Claim 5 (original) The semiconductor diode of Claim 4, further comprising a dielectric film sandwiched between said second metal contact and said metal contacting film, said dielectric film having a geometric dimension less than that of said second metal contact such that said second metal contact is in electrical contact with said metal contacting film.

Claim 6 (original) The semiconductor diode of Claim 1, wherein said substrate is made of a material selected from a group consisting of sapphire and silicon carbide.

Claim 7 (original) The semiconductor diode of Claim 1, wherein said n-type semiconductor material is n-doped GaN material, and said p-type semiconductor material is p-doped GaN material.

Claims 8 through 14 (cancelled)

Claim 15 (new) A semiconductor diode comprising:

a semiconductor die including a substrate, a first semiconductor film formed on said substrate, a second semiconductor film formed on said first semiconductor film, a first metal contact formed on said first semiconductor film, and a second metal contact formed on said second semiconductor film, one of said first and second semiconductor films being made of an n-type semiconductor material, the other one of said first and second semiconductor films being made of a p-type semiconductor material, said semiconductor die having two opposing first side edges *a* and *b* and two opposing second side edges *c* and *d* which cooperate with said first side edges *a* and *b* to define two diagonally opposite first corners *a* and *b* and two diagonally opposite second corners *c* and *d*, said first semiconductor film having an exposed area that is exposed from said second semiconductor film adjacent to first side edge *a* and that extends between said first corner *a* and said second corner *c*, said first metal contact having a first strip portion that is formed on said exposed area, and a first bonding portion that extends from and that has a width greater than that of said first strip portion and a length less than that of said first strip portion, said second metal contact having a second strip portion that is disposed adjacent to said first side edge *b* and that extends between said first corner *b*

and said second corner *d*, and a second bonding portion that extends from and that has a width greater than that of said second strip portion and a length less than that of said second strip portion, said semiconductor diode further comprising a quantum well sandwiched between said first and second semiconductor films.

Claim 16 (new) The semiconductor diode of Claim 15, wherein said first bonding portion is formed on said one of said first corners *a* and *b*, said first strip portion extending from said first bonding portion to said one of said second corners *c* and *d*, said second bonding portion being formed on the other one of said first corners *a* and *b*, said second strip portion extending from said second bonding portion to the other one of said second corners *c* and *d*.

Claim 17 (new) The semiconductor diode of Claim 15, further comprising an ohmic metal contacting film sandwiched between said second semiconductor film and said second metal contact.

Claim 18 (new) The semiconductor diode of Claim 17, further comprising a dielectric film sandwiched between said second metal contact and said metal

contacting film, said dielectric film having a geometric dimension less than that of said second metal contact such that said second metal contact is in electrical contact with said metal contacting film.

Claim 19 (new) The semiconductor diode of Claim 15, wherein said substrate is made of a material selected from a group consisting of sapphire and silicon carbide.

Claim 20 (new) The semiconductor diode of Claim 15, wherein said n-type semiconductor material is n-doped GaN material, and said p-type semiconductor material is p-doped GaN material.

Claim 21 (new) A semiconductor diode comprising:

a semiconductor die including a substrate, a first semiconductor film formed on said substrate, a second semiconductor film formed on said first semiconductor film, a first metal contact formed on said first semiconductor film, and a second metal contact formed on said second semiconductor film, one of said first and second semiconductor films being made of an n-type semiconductor material, the other one of said first and second semiconductor films being made of a p-type semiconductor material, said semiconductor die having two opposing first side edges *a* and *b* and two opposing second side edges *c* and *d* which cooperate with said first side edges *a* and *b* to define two diagonally opposite first corners *a* and *b* and two diagonally opposite second corners *c* and *d*, said first semiconductor film having an exposed area that is exposed from said second semiconductor film adjacent to first side edge *a* and that extends between said first corner *a* and said second corner *c*, said first metal contact having a first strip portion that is formed on said exposed area, and a first bonding portion that extends from and that has a width greater than that of said first strip portion and a length less than that of said first strip portion, said second metal contact having a second strip portion that is disposed

adjacent to said first side edge *b* and that extends between said first corner *b* and said second corner *d*, and a second bonding portion that extends from and that has a width greater than that of said second strip portion and a length less than that of said second strip portion, said semiconductor diode further comprising an ohmic metal contacting film sandwiched between said second semiconductor film and said second metal contact and a dielectric film sandwiched between said second metal contact and said metal contacting film, said dielectric film having a geometric dimension less than that of said second metal contact such that said second metal contact is in electrical contact with said metal contacting film.

Claim 22 (new) The semiconductor diode of Claim 21, wherein said first bonding portion is formed on said one of said first corners *a* and *b*, said first strip portion extending from said first bonding portion to said one of said second corners *c* and *d*, said second bonding portion being formed on the other one of said first corners *a* and *b*, said second strip portion extending from said second bonding portion to the other one of said second corners *c* and *d*.

Claim 23 (new) The semiconductor diode of Claim 21, further comprising a

quantum well sandwiched between said first and second semiconductor films.

Claim 24 (new) The semiconductor diode of Claim 21, wherein said substrate is made of a material selected from a group consisting of sapphire and silicon carbide.

Claim 25 (new) The semiconductor diode of Claim 21, wherein said n-type semiconductor material is n-doped GaN material, and said p-type semiconductor material is p-doped GaN material.